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REMARKS

Claims 1, 3-29, 44-46, and 48-55 are currently pending. Claims 2, 30-43 and 47 have been cancelled without prejudice. Claims 1, 18-23, 27-29, 44, and 45 have been amended for clarity. Claims 48-55 have been added. The amendment to the claims is supported by Figures 77-80 and 82 and pages 86-91 of the specification. It is respectfully submitted that no new matter has been added.

The Patent Office rejected claims 1, 2, 5-17, 20, 22-29 under 35 U.S.C. 102(b) as being fully anticipated by Ohkuma, EP 0 487 086.

Ohkuma discloses a photosensitive recording medium that comprises a composition containing polymerizable monomers and polymerization initiators. Ohkuma also discloses a method of making a hologram by exposing the photosensitive recording medium to an interference pattern of radiation rays and then exposing a region of the medium to light.

The Patent Office suggested that the inclusions of the limitations “a coating composition comprising at least one photosensitive material” and “an optical medium with embossed data” into claim 1 would serve to distinguish this claims from the prior art.

The Patent Office rejected claims 1, 2, 5-17, 20, and 22-29 under 35 U.S.C. 102(b) as being fully anticipated by Ueda et al., ‘066.

The Patent Office rejected claims 1, 2, 5-17, 20, and 22-29, and 44-46 under 35 U.S.C. 103(a) as being unpatentable over Ueda et al., ‘066.

Ueda discloses a hologram recording sheet in which regions contain at least two hologram recording sensitive materials sensitive to different wavelength regions. Two or more lasers, each of a different center frequency, are used to record on the hologram recording sheets.

The Patent Office rejected claims 1, 2, 5-17, 20, 22-29, and 44-46 under 35 U.S.C. 102(b) as being fully anticipated by Sakojiri et al., ‘367.

Sakojiri discloses a multicolor imaging material that comprises a capsule layer. Laser light of different wavelengths is used to melt the capsules to cause a reaction with color formers.

The Patent Office rejected claims 1-17, 19, and 22-29 under 35 U.S.C. 102(b) as being fully anticipated by Seaki et al., ‘373.

Seaki discloses a multicolor recording material whose color may be developed through

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irradiation by visible light, infrared rays, or X rays in which the contained leuco dyes are oxidized.

The Patent Office rejected claims 1, 5-17, 20, and 22-29 under 35 U.S.C. 102(b) as being fully anticipated by Iwai et al. EP 0720053.

Iwai discloses a photosensitive resin composition comprising a high polymer binder, a monomer, a photopolymerization initiator generating a radical on exposure to visible light of a wavelength of 400 to 700 nm. Iwai also discloses a method manufacturing a printing master plate comprising the steps of exposing a photosensitive printing plate which has a laminated layer made from a photosensitive resin composition thereon to visible light of wavelength in the range of 400 to 600 nm selectively in an imagewise configuration in order to harden the resin composition layer, developing the photosensitive printing plate, and further exposing the developed plate to light of a wavelength in the range 200 to 380 nm.

The Patent Office rejected claims 1, 5-17, 18, 20, and 22-29 under 35 U.S.C. 102 (b) as being fully anticipated by Iwai et al., '746.

Iwai discloses a photosensitive resin composition including a high polymer binder, a monomer, and a photopolymerization initiator generating a radical on exposure to visible light of a wavelength of 400 to 700 nm. A method for manufacturing a printing plate is also disclosed.

The Patent Office rejected claims 1-17, 19-20, and 22-29 and 44-46 under 35 U.S.C. 102(b) as being fully anticipated by Gaudiana et al. '118.

Gaudiana discloses a process for producing an image uses an imaging medium comprising an acid-generating layer or phase comprising a mixture of a superacid precursor, a sensitizing dye and a secondary acid generator, and a color-change layer comprising an image dye. The imaging media is exposed to light at 501 nm (0.93 mW/cm.sup.2 exposure).

The Patent Office rejected claims 1-29 and 44-46 under 35 U.S.C. 103(a) as being unpatentable over Gaudiana et al. '118, in view of Iwai et al. '746 and/or Patel et al. '820.

Gaudiana and Iwai '746 have been discussed. Patel discloses a method for producing a color image on a photosensitive medium in which color separation masks are sequentially generated in a smectic liquid crystal.

The Patent Office rejected claims 1, 2, and 5-29 under 35 U.S.C. 102(b) as being fully anticipated by Krasulak, WO 99/65696.

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None of the cited references (including Krasulak) teach how to make a visible image on the readout side of an optical disc and still have the disc playable. In fact, the image creation methods of each cited reference would result in a non-playable disc, i.e., those methods are not suitable for the purpose of forming an image in the data readout area. The cited references all disclose various methods of creating images: some use photosensitive layers, some use masks. Applicant's claim 1 recites "readout area" and "optical media."

Krasulak discloses a method and apparatus for forming a permanent image on a substrate such as an optical disk (2) or compact disk. The disk (2) is covered with an ink having a pigment having a change in visibility due to electromagnetic radiation (3) of a first wavelength and being curable by irradiation at a second wavelength. The first wavelength exposure via a mask (1) determines the resultant image and the second wavelength exposure cures the image. An LCD may be used rather than a mask (1) to determine the image whilst the image information may be stored electronically in a computer to avoid the need for physical storage of the mask (1). A disk (2) having a fixed image is also disclosed.

Krasulak's patent is distinct from the other cited references because Krasulak discusses CDs. However, Krasulak does not address imaging on the readout side of the disc. Instead, Krasulak's disclosed process is based on photosensitive pigments (pigments are particles rather than molecules) that is different from our process for two reasons: chemistry (Applicant discloses dyes which are molecules) and noninterference with the readout (the pigments in Krasulak being particles that would likely cause scattering and make the disc unreadable). Krasulak's process also involves imaging of uncured ink, then curing it, while the claimed invention recites the reverse order of first curing and then imaging. Furthermore, Krasulak's order of light exposure would likely produce topography on the cured layer that may be acceptable on the label side of the CD, but is unacceptable for the readout side of a CD.

The Patent Office rejected claims 1-29 and 44-46 under 35 U.S.C. 103(a) as being unpatentable over Krasulak, WO 99/65696, in view of Gaudiana et al. '118.

The Patent Office rejected claims 1-29 and 44-46 under 35 U.S.C. 103(a) as being unpatentable over Krasulak WO 99/65696, in view of Gaudiana et al. '118, further in view of Grossa DE 4240141.

Krasulak and Gaudiana have been discussed.

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Grossa discloses a radiation-polymerisable photoresist composition that (I) contains a polymeric binder (II); an ethylenically unsaturated compound (III) undergoing additional polymerisation; a leuco dyestuff (IV); a hexaaryl-bisimidazole free radical initiator compound (V) activated by radiation; and a visible and/or IR-sensitising dyestuff (VI). The material was exposed for 60 s with 400 - 500 nm light in contact with a mask with a mark (as a transparent image), giving a violet image on a yellow ground. It was then exposed for 60 s with 340-380 light through a circuit mask (as a transparent image).

Claims 1, 3-29, 44-46, and 48-55 are patentable over the prior art of record because these claims recite three or more units that have specified capabilities such as spincoating, curing, or color forming. This claimed subject matter is not found or suggested in any of the cited references. Thus, claims 1, 3-29, 44-46, and 48-55 is allowable over the prior art of record.

Applicant is mindful of the examiner's suggestion to include the limitations "a coating composition comprising at least one photosensitive material" and "an optical medium with embossed data" and has a claim to capture this subject matter.

The Examiner is respectfully requested to reconsider and remove the rejections of the claims under 35 U.S.C. 102(b) or 103(a) based on Ohkuma, Ueda '066, Sakojiri, Seaki, Iwai EP 0720053, Iwai '746, Gaudiana '118, Patel '820, Grossa, or Krasulak, alone or in combination, and to allow all of the pending claims 1, 3-29, 44-46, and 48-55 as now presented for examination. An early notification of the allowability of claims 1, 3-29, 44-46, and 48-55 is earnestly solicited.

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Respectfully submitted:

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November 16, 2006

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